



Business & CommUNITY Services

University of Northern Iowa

Skilled Worker & Job Creation Fund

Interim Committee Presentation

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11/19/13

Businesses &
Entrepreneurs



Communities &
Local Governments



Environment &
Sustainability



Building a
Better Iowa

Today's Presentation

- Rapid Casting Technology – 3D Printing
- Advance Iowa – Economic Gardening
- Regents Innovation Fund



UNIBCS

Rapid Casting Technology

- Operated under the direction of the UNI Metal Casting Center
- Largest printable area available in any 3D printer in North America and can produce molds for virtually any metal alloy



Rapid Casting Technology

- Operation of the printer will allow UNI to:
 - Participate in advanced technology funded programs
 - Provide students with cutting edge education experience
 - Help the center move towards a sustainable business model



Rapid Casting Technology

- Located off Campus at the Cedar Valley TechWorks
- Provides a solid starting point for the Iowa Advanced Manufacturing Center



Rapid Casting Technology

- Supports UNI collaboration with :
 - National Additive Manufacturing Innovation Institute (NAMII)
 - National Center for Digital Manufacturing & design Innovation
 - American Metal Casting Consortium
 - American Foundry Society
 - Steel Founders Society of America
 - Benet Laboratories
 - Rock Island Arsenal



Rapid Casting Technology

- Provides the ability to support Iowa Manufacturers including :
 - Deere & Company – New Tractor Build – new engine prototypes
 - UES, Waverly – Limited production hydraulic swivel castings
 - Sivyer Steel – Prototype castings for Caterpillar
 - Caterpillar – Wear bushings
 - Vermeer Manufacturing -
 - Viking Pump -
 - Wellman Dynamics Fansteel
 - Many other Iowa Manufacturers



Purchased Equipment

- Build Volume (WxDxH): 1800 x 1000 x 700 mm (70 x 39 x 27 in.)
- Furan binder system (low risk)
- Build Speed = $0.032\text{ft}^3/38\text{ sec}$ – 331 lbs/hour
- ExOne S-Max Printer (\$1.5m)



Status Report

- August 22, placed order for equipment
- September 9th, printer arrived on Boeing 747 from Germany
- September 27th installed the printer
- October 14th started printing 1209 lbs. of prototype cores for Deere & Company
- October 31st submitted NAMII proposal
- Currently working with four companies

ADVANCE IOWA

Iowa's Economic Gardening Program

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What is Economic Gardening?

- An economic development program
- Focused on “growing your own” companies
 - As opposed to recruiting new companies
 - Pioneered by Chris Gibbons in Littleton, CO
- Focused strictly on growth companies in Iowa that fit some basic criteria.
 - 10-100 Employees
 - \$.5 Million to \$50 Million in annual revenue



What Makes It Different?

- Focus on Stage II growth companies
- Focus on strategic issues
- High end, sophisticated corporate level tools
- Deep underlying scientific principles
 - Core Strategy
 - Market Dynamics
 - Innovation

What is Provided

Strategic Information

- Market research
- Competitor intelligence
- Industry trends
- Custom research

Strategic Frameworks for five classes of business problems

- Market dynamics
- Core strategy
- Innovation
- Qualified sales leads
- Team dynamics



Example Projects

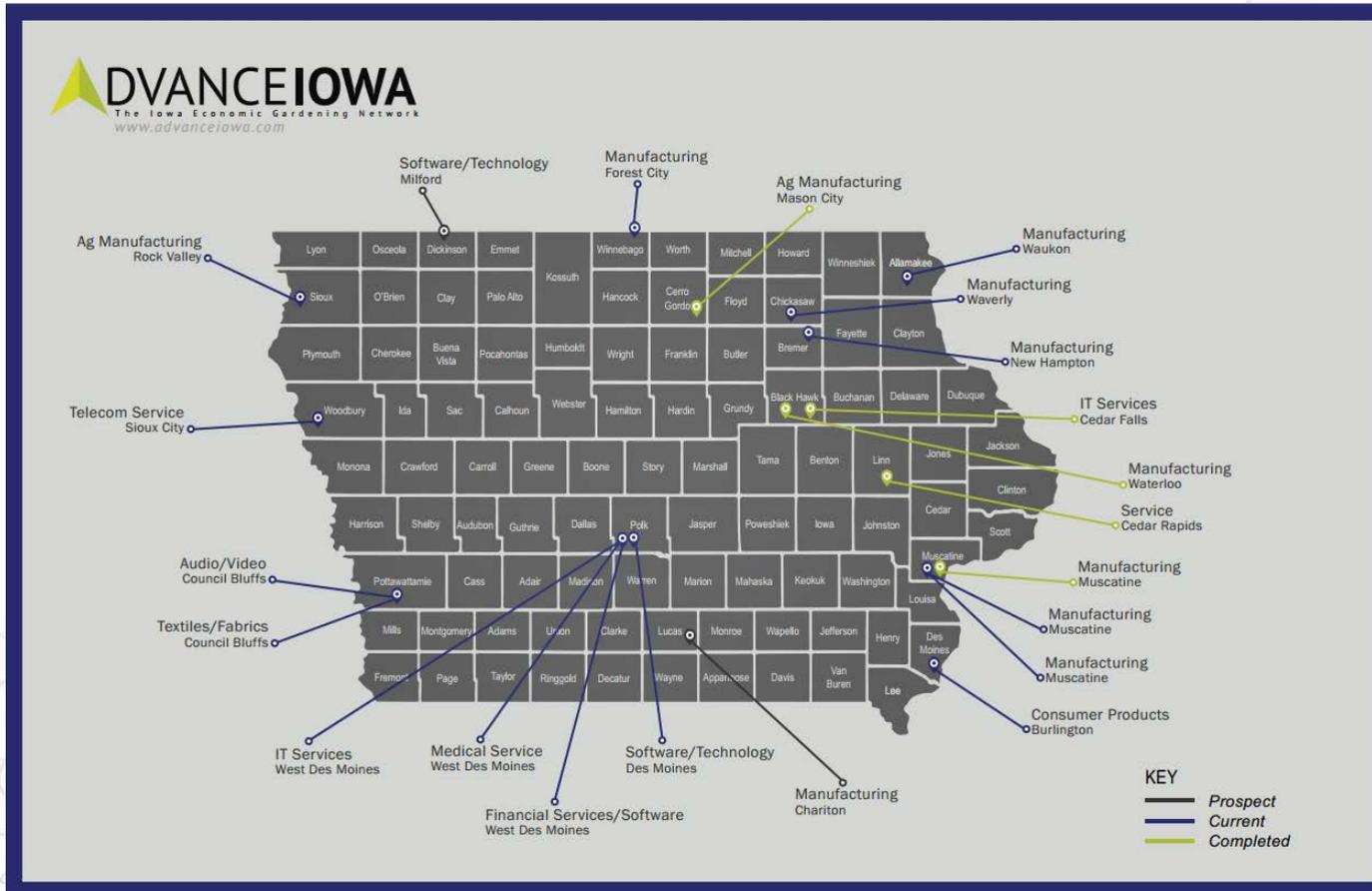
Consumer Food Company

- Online growth strategies
- Distribution via Amazon
- New product launch –
regulations/marketing/pricing

Construction Equip. Manufacturer

- Prospect identification and filtering
- Geographic targeting

Clients Served



UNI FY14 Projects

Innovation

- Expanded Innovation Research Competition
- Apps Lab for Mobile Applications
- Additive Manufacturing
 - 3D Printing for Castings Industry



Entrepreneurship

- Speak Out Small Business
- Advance Iowa – Statewide



MarketSolve / Market Intelligence

Regional Development

- Reorganizing Iowa's Regions



SMS MarketSolve

A program to help Iowa companies increase sales.

Economic Development Impact

Entrepreneur Startups

- 40 Companies Incubated
- 57 Student Companies Launched
- 10 New Technologies Being Pursued

Entrepreneur Support

- MyEntre.Net Resources – Build Outs
- IASourceLink.com
- Business Concierge
- Advance Iowa Launched
- Incubator Expansion

MyEntre.Net
DREAM BIG. GROW HERE.

Business Concierge
Ask Us Anything!

IA SOURCE LINK

ADVANCE IOWA
The Iowa Economic Gardening Network

Thank you.

For more information, please visit

www.bcs.uni.edu



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